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Sugar and Sweeteners Outlook

Stephen Haley, coordinator

shaley@ers.usda.gov

U.S. Sugar November 2011

The U.S. Department of Agriculture (USDA) projects 2011/12 sugar production in Mexico at 5.330 million metric tons (5.650 million metric tons, raw value (MTRV)). Although the Comite Nacional Para El Desarrollo Sustentable de la Cana de Azcuar in Mexico City has not yet announced its factory-level FY 2012 production forecasts, the USDA expects area harvested to be about the same as last year but expects better sugarcane yields than last year. The USDA estimates 2010/11 sugar consumption in Mexico at 3.950 million tons and projects 2011/12 consumption at 4.012 million tons. Consumption of high fructose syrup for 2010/11 is estimated at 1.635 million tons and also projected at that level for 2011/12. The USDA estimates 2010/11 sugar exports at 1.469 million tons (1.557 million MTRV), and projects 2011/12 exports at 1.362 million tons (1.444 million MTRV), an increase of 37 percent over last month's projection.

The USDA projects 2012 fiscal year (FY) U.S. beet sugar production at 4.525 million STRV–a reduction of 50,000 STRV, or 1.1 percent, from last month. This reduction matches the 1.1 percent reduction that the National Agricultural Statistics Service made to the 2011/12 sugarbeet crop. The FY 2012 cane sugar forecast is 3.360 million STRV, the same as last month.

FY 2011 sugar imports are estimated at 3.698 million STRV, an increase of 17,180 STRV from last month. Most of the increase is attributable to additional imports in September from Mexico and a small decrease in estimated imports at the high-tier tariff. FY 2012 tariff-rate quota (TRQ) raw sugar imports are projected at 1.099 million STRV, a reduction of 116,263 STRV from last month's projection. This reduction is mainly due to a lower level of deferred imports from the FY 2011 TRQ that did not enter in October as expected. FY 2012 sugar imports from Mexico are expected to increase substantially from last month's projection of 1.155 million STRV to 1.581 million STRV.

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The next release is December 14, 2011`

Approved by the World Agricultural Outlook Board.

Deliveries for human consumption in FY 2011 are estimated at 11.082 million STRV, an increase of 165,662 STRV, or 1.5 percent, over the previous fiscal year. The projection for FY 2012 is 11.225 million STRV, consistent with trend growth.

The estimate for ending year FY 2011 stocks held by domestic processors and refiners is 1.487 million STRV, implying an ending year stocks-to-use ratio of 12.9 percent. The FY 2012 projection of ending year stocks is calculated as the difference between total supply and total use. The projection is 1.212 million STRV, implying an ending year stocks-to-use ratio of 10.4 percent.

Mexican Sugar and High Fructose Corn Syrup

Production

The U.S. Department of Agriculture (USDA) projects 2011/12 sugar production in Mexico at 5.330 million metric tons (5.650 million metric tons, raw value (MTRV)). Although the *Comite Nacional Para El Desarrollo Sustentable de la Cana de Azuca* (CNDSCA) has not yet announced its factory-level FY 2012 production forecasts, the USDA expects area harvested to be about the same as last year but expects better sugarcane yields than last year. Although some observers have noted that dry conditions could affect yields, rainfall data from Mexico through November 5 show above average cumulative precipitation in the largest sugarcane producing area of Veracruz (fig. 1) and average cumulative precipitation in the second largest producing area of western Mexico (fig. 2).

Although input use data are not yet available, the USDA notes the likelihood that rates of fertilizer use and other production-enhancing inputs will contribute to higher yields because of above-average returns on sugarcane production during the previous two growing seasons. Figure 3 shows sugarcane prices for 2009/10 and 2010/11 above \$50 per metric ton, far exceeding prior years' returns (which averaged below \$40 per metric ton) and exceeding comparable returns to sugarcane production in the United States. Figure 4 shows Mexico's ratio of sugarcane price to the average field costs of sugarcane planting, cultivation, and harvesting. The ratio for 2009/10 is calculated at close to 200 percent and the provisional ratio for 2010/11 is above 200 percent. These levels far exceed the poor return relative to costs in 2008/09 and average 150 percent for the first 7 years of 2001/02-2007/08 shown in the figure.

Consumption

Supply and use data from CNDSCA show 2010/11 sugar consumption at 3.950 million metric tons. More than 97 percent of this sugar was from domestic production, with imports from the United States contributing to only 0.3 percent of consumption and imports from other countries contributing only 2.4 percent. Figure 5 shows that 2010/11 sugar consumption declined 9.3 percent from the 2009/10 (4.354 million tons) and declined 20.9 percent relative to 2008/09 (4.993 million tons). Estandar sugar in Mexico City averaged about 40 cents per pound (lb) in both 2009/10 and 2010/11, up from 23.8 cents per lb in 2008/09. Comparable refinado sugar prices averaged about 45 cents per lb in 2009/10 and 2010/11, up from 27.0 cents per lb in 2008/09. These prices rose primarily through strengthened linkages to prices in the United States from expanded exports.

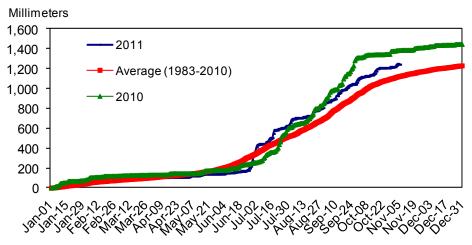
Sugar use in Mexico was replaced by increased use of high fructose corn syrup (HFCS), especially by Mexico's soft drink industry. CNDSCA shows 2010/11 HFCS consumption at 1.635 million tons, dry weight, up from 1.418 million tons in 2009/10 and 662,000 tons in 2008/09. Most of the HFCS is imported from the United States, with domestic production between 425,000-475,000 tons. In 2010/11, the HFCS share of combined sugar and HFCS consumption was 29.3 percent, up from 24.6 percent in 2009/10 and 11.7 percent in 2008/09.

Combined sweetener consumption in 2010/11 is calculated at 5.585 million tons, a decline of 3.2 percent relative to 2009/11. Sweetener consumption declined by even more on a per capita basis—4.3 percent, or 51.31 kilograms to 49.11 kilograms. One hypothesis for the decline is that undocumented sugar in large quantities from Guatemala and Honduras entered into Mexico because of substantially higher sugar prices in Mexico than in those countries. This phenomenon remains a pressing topic for future research.

The USDA projects 2011/12 sweetener use at 5.647 million tons, an increase fully attributable to population growth. This implies that per capita sweetener consumption in 2011/12 will be the same as in 2010/11. (If the 2010/11 per capita sweetener consumption is understated, then the factors responsible for the understatement are assumed to have the same effect in 2011/12.) HFCS consumption is projected at the same level as in 2010/11–1.635 million tons. HFCS prices are likely to be higher in 2011/12 due to higher input costs, and logistical constraints present in 2010/11 are unlikely to be resolved in the new year. Sugar consumption is therefore projected at 4.012 million tons (4.252 million MTRV)—representing growth of about 1.6 percent.

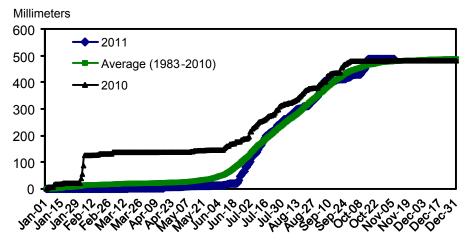
Figure 1

Veracruz: Cumulative precipitation, comparison of 2011 with previous year



Source: USDA, WAOB, Agricultural Weather Assessments.

Figure 2
Western Corn Belt: Cumulative precipitations comparison of 2011 with previous years



Source: USDA, WAOB, Agricultural Weather Assessments.

Figure 3

Sugarcane prices in Mexico and the United States

Dollars per tonnes

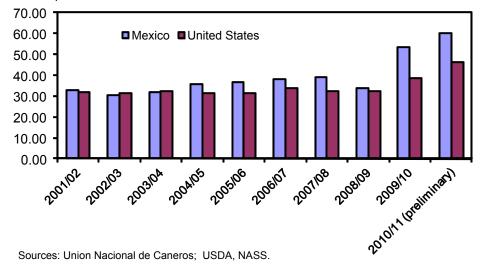


Figure 4

Ratio of Mexico sugarcane price relative to field cost of production

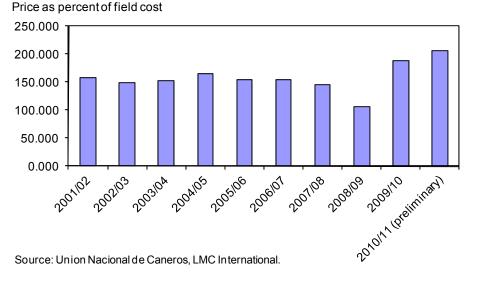
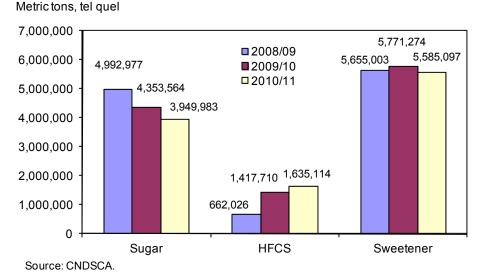


Figure 5

Sweetener consumption in Mexico, 2008/09-2010/11



IMMEX Program Deliveries

The CNDSCA estimates sugar for the Mexican sugar-containing product re-export program at 319,800 tons. Sugar for the IMMEX program came primarily from imports—208,732 tons, or 65 percent, with the remainder from domestic production. All but a tiny amount of the sugar imported for IMMEX came from the United States. The USDA projects overall 2011/12 IMMEX sugar at 283,000 tons (300,000 MTRV).

Sugar Imports

CNDSCA estimates 2010/11 sugar imports for consumption at only 107,448 tons. (Official trade data from the Secretariat of the Economy, or *Economia*, is available only through August.) The USDA procedure, however, is to count imports for IMMEX in the supply-use balance. This increases total imports to 316,180 tons (335,151 MTRV).

The USDA projects 2011/12 imports at 449,486 tons (476,455 MTRV). About 38 percent of these imports will be sourced from the United States for use in Mexico's IMMEX program operations. Only about 30,000 tons of the tariff-rate quota (TRQ) for 150,000 tons announced on June 6, 2011 entered before the end of 20110/11, leaving about 120,000 tons to enter in 2011/12. Another TRQ for 150,000 tons was announced on October 20, 2011. Other small amounts, either for consumption or IMMEX, are expected to raise the total to the USDA-projected amount.

Sugar Exports, Ending Stocks, and Miscellaneous

The USDA estimates 2010/11 sugar exports at 1.469 million tons (1.557 million MTRV). The estimate is greater than the CNDSCA estimate of 1.388 million tons because U.S. estimates of sugar imports from Mexico are greater than CNDSCA estimates of sugar exports to the United States.

The USDA accepts the CNDSCA estimate of ending stocks at 759,600 tons, implying an ending stocks-to-consumption ratio of 19.2 percent. (This amount is 109,400 tons below the optimal ending stocks level, an amount equal to 22 percent of estimated consumption.) In order to balance estimated use with estimated supply, a residual miscellaneous quantity of 80,140 tons is included in the calculation of total use.

At this point in the projection cycle for the 2011/12 Mexico sugar supply and use balance, the USDA adapts the optimal ending stocks level (22 percent of projected sugar consumption) as projected ending stocks. This amount is 882,540 tons (935,500 MTRV). Exports are projected residually in order to balance total supply and use. This amount is 1.362 million tons (1.444 million MTRV), an increase of about 37 percent from last month's projection. The increase is roughly attributable to changes from last month's projections as follows: an 81,000-ton increase in beginning stocks, an increase in imports of 194,000 tons, and a reduction in consumption of 75,000 tons.

U.S. Sugar

On November 9, 2011, the National Agricultural Statistics Service (NASS) published forecasts for sugarbeet and sugarcane area harvest, yield, and production for 2011/12. The Farm Service Agency (FSA) released the *Sweetener Market Data* (SMD) for September. The September SMD contains sugar supply and use estimates for all 12 months of the 2011 fiscal year (FY). Especially important are ending fiscal year stock levels reported by sugarcane and sugarbeet processors and cane sugar refiners. On the basis of these data, the Interagency Commodity Estimates Committee (ICEC) for sugar finalizes estimates for U.S. sugar supply and use for FY 2011 and adjusts projections for FY 2012 in the *World Agricultural Supply and Demand Estimates* (WASDE).

Beet Sugar Production

In line with expectations, beet sugar production in September was recorded at a low level of 227,000 short tons, raw value (STRV), far below the previous 5-year average for September of 351,000 STRV. FY 2011 beet sugar production ended at 4.663 million STRV, fairly close to last month's estimate.¹

The USDA projects 2011/12 beet sugar production at 4.525 million STRV—a reduction of 50,000 STRV, or 1.1 percent, from last month. This reduction matches the 1.1 percent reduction that NASS made to the 2011/12 sugarbeet crop. Figure 6 shows NASS sugarbeet yield forecasts made for the 2011/12 sugarbeet crop since August, nationally and by region, including a comparison with the final yield estimates for last year. Although yield forecasts since August have increased in the Northwest (Idaho, Oregon) and in the Great Plains (Colorado, Montana, Nebraska, Wyoming), large reductions in Minnesota and North Dakota (Red River Valley) have brought the national average down from 25.0 tons per acre forecast in August to 23.9 tons per acre in November.

As noted in earlier editions of the *Sugar and Sweetener Outlook*, cold and wet weather in the Red River Valley, and also in Michigan, led to late planting. This, along with below-average growing conditions in the Red River Valley, led to a later-than-usual harvest (fig. 7) (thereby lowering FY 2011 beet sugar production). As evidenced by the successively lower yield forecasts, the desired higher additional crop production did not result from the later harvest.

Figure 8 gives a historical perspective to the FY 2012 beet sugar forecast. The figure shows a downward trend in area harvested since 1999/00. Because of the difficult planting conditions in the spring, 2011/12 planted area increased above trend as additional area was planted late to compensate for expected lower yields. The figure also shows an upward trend in sugar per harvested acre since 1999/00.² The sugar yield expected in 2011/12 is shown as far below the historical trend. The contrast to 2010/11 is evident—area was then at about its trend level and sugar yield was much above trend.

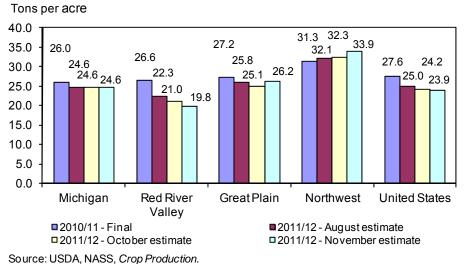
Cane Sugar Production

The FY 2012 cane sugar forecast is 3.360 million STRV, the same as last month. This is 186,000 STRV more than last year and is basically attributable to a return to a normal crop in Florida. Harvest production has started in the mainland States and continues in Hawaii. Additional harvest progress is expected in next month's *Crop Production* from NASS, and SMD will have cane sugar production estimates for October.

Although FY 2011 beet sugar production is not particularly impressive, beet sugar production resulting from the 2010/11 sugarbeet crop is estimated much higher. That is because a substantial portion of the 2010/11 sugarbeet crop was harvested before the start of the 2011 fiscal year, thus adding to the previous fiscal year's beet sugar production total. For a September/August crop year, beet sugar production is estimated at 4.897 million STRV. The sugar produced from the 2010/11 sugarbeet crop is even higher because sugar produced from the crop started in August and is not included in the September/August crop-year sugar production estimate.

² Higher sugar yields and lower planted area are likely related to each other, especially in view of marketing allotments placing restrictions on fiscal year beet sugar sales.

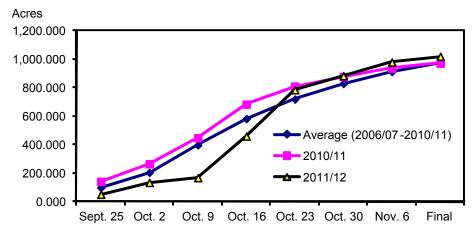
Figure 6
Regional sugarbeet yield estimates, 2010/11 final and 2011/12 monthly, August-November



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Figure 7

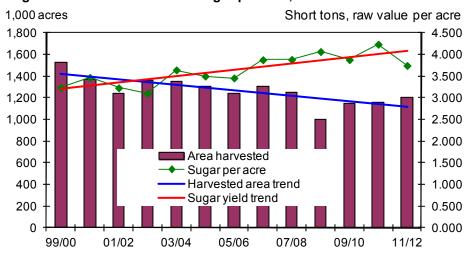
Pace of sugarbeet area harvested in Idaho, Michigan, Minnesota, and North Dakota



Source: USDA, NASS, Crop Progress.

Figure 8

Sugarbeet area harvested and sugar per acre, 1999/00-2011/12



Source: USDA, NASS, Crop Production; and WASDE.

Louisiana cane sugar production for September is estimated in SMD at 21,800 STRV. The final FY 2011 cane sugar estimate is 1.413 million STRV for Louisiana. Along with the September estimate of 23,870 STRV for Hawaii (with total fiscal year production at 182,130 STRV), the FY 2011 cane sugar production is estimated at 3.174 million STRV.

Sugar Imports

FY 2011 sugar imports are estimated at 3.698 million STRV, an increase of 17,180 STRV from last month. Most of the increase is attributable to additional imports in September from Mexico and a small decrease in estimated imports at the high-tier tariff.

Table 1 shows additional detail for the FY 2011 TRQ. As explained in last month's *Sugar and Sweetener Outlook*, the USDA expected 123,306 STRV of deferred imports from the FY 2011 TRQ to enter the United States in October. However, these imports did not occur as expected—only 21,444 STRV entered into the United States, 101,862 STRV less than expected. In table 1, the raw sugar shortfall is shown at 186,923 STRV, an increase of 101,862 STRV over last month, exactly offsetting the lower FY 2011 TRQ entries expected in October.

FY 2012 TRQ raw sugar imports are projected at 1.099 million STRV, a reduction of 116,263 STRV from last month's projection (Table 2). This reduction stems from lower imports from FY 2011 raw sugar TRQ entries, as explained above, and by an increased projection of an FY 2012 shortfall of 14,402 STRV.

As detailed in the chapter on Mexico, sugar imports from Mexico are expected to increase substantially from last month's projection of 1.155 million STRV to 1.581 million STRV. Imports occurring at the high-tier tariff are expected at 5,000 STRV, down from 10,000 STRV last month. Overall, total imports are projected at 3.455 million STRV.

Figure 9 gives a historical perspective to the level and composition of imports since 2006/07. With the full implementation of the sugar provisions of the North American Free Trade Agreement (NAFTA) in January 2008,

Table 1--USDA estimate of sugar imports in FY 2011

Total projected imports 1/ Total entries from Mexico, quota and non quo	3,355,052	3,698,311
Sugar syrups, high-tier	17,088	18,836
Re-export program imports	255,338	281,462
Mexico	1,546,909	1,705,175
Total estimate TRQ entries	1,535,717	1,692,838
Less shortfall	-2,000	-2,205
Peru	2,000	2,205
Less shortfall	-4	-4
Singapore, Bahrain, Jordan	20	22
CAFTA/DR TRQ - calendar 2011 CAFTA/DR FY 2011, likely to enter FY 2012 Other:	125,700 -42,544	138,561 -46,897
Total refined sugar TRQ	104,654	115,361
Additional August increase	77,111 9,072	85,000 10,000
Specialty Base	1,656	1,825
FY 2011 Global to enter in FY 2012	-111,078	-122,443
Global	118,168	130,258
Allocation to Mexico Less Mexican shortfall 1/	0	0 0
Allocation to Canada FY 2011 Canada sugar to enter in FY 2012	35,300 -25,575	38,912 -28,192
-	35 300	29.042
Refined sugar TRQ	-,,	3,100,100
Total raw sugar TRQ	1,347,891	1,485,796
Less FY 2011 TRQ entries in October 2011 Plus FY 2012 TRQ entries in September 2011	-19,454 20,062	-21,444 22,115
Less FY 2011 TRQ entries in September 2010	-37,007	-40,793
Plus FY 2010 TRQ entries in October 2010	32,971	36,344
Less shortfall attributable to Mexico 1/ Less other shortfall	0 -169,574	0 -186,923
Raw sugar TRQ	1,520,892	1,676,497
	Metric tons, raw value	Short tons, raw value
Table 1USDA estimate of sugar imports in FY	2011	

^{1/} Total entries from Mexico, quota and non-quota, reflected below. Source: USDA, Foreign Agricultural Service.

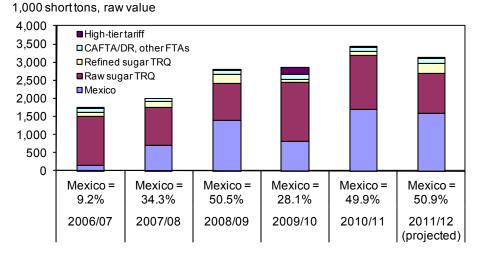
Table 2--USDA estimate of sugar imports in FY 2012

	Metric tons, raw value	Short tons, raw value
Raw sugar TRQ	1,117,195	1,231,497
Less shortfall attributable to Mexico 1/ Less other shortfall	-120,000	-132,277
Plus FY 2011 TRQ entries in October 2011 Less FY 2012 TRQ entries in September 2011	19,454 -20,062	21,444 -22,115
Total raw sugar TRQ	996,587	1,098,549
Refined sugar TRQ		
Allocation to Canada FY 2011 Canada sugar to enter FY 2012	12,050 25,575	13,283 28,192
Allocation to Mexico Less Mexican shortfall 1/		
Global FY 2011 Global sugar to enter FY 2012	8,294 111,078	9,143 122,443
Specialty Base Additional	1,656 90,718	1,825 100,000
Total refined sugar TRQ	249,371	274,885
CAFTA/DR TRQ - calendar 2012 CAFTA/DR FY 2011, likely to enter in FY 2012 CAFTA/DR FY 2012, forecast to enter in FY 2013 Other: Singapore, Bahrain, Jordan Peru	128,020 42,544 -40,000 21 2,000	141,118 46,897 -44,092 23 2,205
Total estimate TRQ entries	1,378,543	1,519,584
Mexico	1,434,000	1,580,714
Re-export program imports	317,518	350,000
Sugar syrups, high-tier	4,536	5,000
Total projected imports 1/ Total entries from Mexico, quota and non-quota a	3,134,597	3,455,298

^{1/} Total entries from Mexico, quota and non-quota, reflected below.

Source: USDA, Foreign Agricultural Service.

Figure 9
U.S. sugar imports for consumption, by import category, 2006/07-2011/12



Source: USDA, Foreign Agricultural Service.

Mexico's share of imports has been large. Mexican imports constituted only 9.2 percent of imports for consumption in 2006/07 before NAFTA, and rose to more than a third in 2007/08. Mexico's share has averaged about 50 percent in 2008/09 and 2010/11, and is projected at that level in 2011/12.

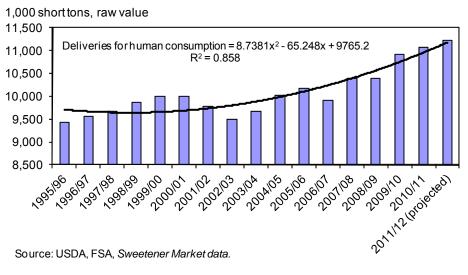
Sugar Deliveries and Ending Stocks

Deliveries for human consumption in FY 2011 are estimated at 11.082 million STRV, an increase of 165,662 STRV, or 1.5 percent, over the previous fiscal year. The projection for FY 2012 is 11.225 million STRV, consistent with the growth trend seen in figure 10.

Direct consumption imports, mainly from Mexico but also from Central American countries, are estimated at 938,517 STRV for FY 2011. This amounts to 8.5 percent of total deliveries for human consumption. Deliveries for human consumption from domestic beet processors and cane refiners in FY 2011 are estimated at 10.144 million STRV, about only 3.3 percent above the average for the preceding 5 years. Most of the growth in sugar deliveries for human consumption in recent years (fig. 10) is attributable to increased direct consumption imports.

The SMD estimate for ending fiscal year stocks held by domestic processors and refiners is 1.487 million STRV, implying an ending year stocks-to-use ratio of 12.9 percent. The FY 2012 projection of ending year stocks is calculated as the difference between total supply and total use. The projection is 1.212 million STRV, implying an ending year stocks-to-use ratio of 10.4 percent.

Figure 10
U.S. sugar deliveries for human consumption, estimated for 1992/96-2010/11 and projected for 2011/12



216 769 680 089 057 585 206 241 0	2,180 7,900 3,915 3,985 1,980 1,580 174 251 0	1,528 8,426 4,462 3,964 2,129 1,367 191 276 0	2003/04 1,670 8,649 4,692 3,957 2,154 1,377 175 251 0	1,897 7,876 4,611 3,265 1,693 1,157 158 258	2005/06 short tons, i 1,332 7,399 4,444 2,955 1,367 1,190 175	1,698 8,445 5,008 3,438 1,719	1,799 8,152 4,721 3,431 1,645	1,664 7,531 4,214 3,317 1,577	1,534 7,963 4,575 3,387	1,498 7,836 4,663 3,174	2011/12 1,487 7,885 4,525 3,360
769 680 089 057 585 206 241 0	7,900 3,915 3,985 1,980 1,580 174 251	8,426 4,462 3,964 2,129 1,367 191 276	8,649 4,692 3,957 2,154 1,377 175 251	1,897 7,876 4,611 3,265 1,693 1,157 158 258	1,332 7,399 4,444 2,955 1,367 1,190	1,698 8,445 5,008 3,438 1,719	8,152 4,721 3,431	7,531 4,214 3,317	7,963 4,575 3,387	7,836 4,663	7,885 4,525
769 680 089 057 585 206 241 0	7,900 3,915 3,985 1,980 1,580 174 251	8,426 4,462 3,964 2,129 1,367 191 276	8,649 4,692 3,957 2,154 1,377 175 251	7,876 4,611 3,265 1,693 1,157 158 258	7,399 4,444 2,955 1,367 1,190	8,445 5,008 3,438 1,719	8,152 4,721 3,431	7,531 4,214 3,317	7,963 4,575 3,387	7,836 4,663	7,885 4,525
680 089 057 585 206 241 0	3,915 3,985 1,980 1,580 174 251 0	4,462 3,964 2,129 1,367 191 276	4,692 3,957 2,154 1,377 175 251	4,611 3,265 1,693 1,157 158 258	4,444 2,955 1,367 1,190	5,008 3,438 1,719	4,721 3,431	4,214 3,317	4,575 3,387	4,663	4,525
089 057 585 206 241 0	3,985 1,980 1,580 174 251 0	3,964 2,129 1,367 191 276	3,957 2,154 1,377 175 251	3,265 1,693 1,157 158 258	2,955 1,367 1,190	3,438 1,719	3,431	3,317	3,387		
057 585 206 241 0 590	1,980 1,580 174 251	2,129 1,367 191 276	2,154 1,377 175 251	1,693 1,157 158 258	1,367 1,190	1,719				3,174	3 360
585 206 241 0 590 277	1,580 174 251 0	1,367 191 276	1,377 175 251	1,157 158 258	1,190		1,645	1 577	4 0 4 0		3,300
206 241 0 590 277	174 251 0	191 276	175 251	158 258		4 000		1,011	1,646	1,433	1,630
241 0 590 277	251 0	276	251	258	175	1,320	1,446	1,397	1,469	1,413	1,400
0 590 277	0				175	177	158	152	112	146	160
590 277	-	0	0		223	222	182	192	161	182	170
277			_	0	0	0	0	0	0		
	1,535	1,730	1,750	2,100	3,443	2,080	2,620	3,082	3,320	3,698	3,455
	1,158	1,210	1,226	1,408	2,588	1,624	1,354	1,370	1,854	1,693	1,520
238	296	488	464	500	349	390	565	308	448	281	350
76	81	32	60	192	506	66	701	1.404	1.017	1.724	1,586
						60	694		807	1,705	1,581
575	11,615	11,684	12,070	11,873	12,174	12,223	12,571	12,277	12,817	13,033	12,827
	137	142	288	259	203	422	203	136	211	248	200
						422	203	136	211	248	200
0	0	0	0	0	0						
122	24	161	23	04	67	132	0	0	45	12	0
											0
											0
-						-				-	0
113	-24	101	23	94	-07	-132	U	U	-4 5	-12	U
132	9,974	9,711	9,862	10,188	10,340	10,135	10,704	10,607	11,152	11,310	11,415
00	450	400	440	404	400	400	444	400	004	400	450
											150
											40
000	9,785	9,504	9,678	10,019	10,184	9,913	10,501	10,441	10,917	11,082	11,225
396	10,087	10,014	10,172	10,542	10,476	10,424	10,907	10,743	11,319	11,546	11,615
	1,528	1,670	1,897	1,332	1,698	1,799	1,664	1,534	1,498	1,487	1,212
	1,316										
784	212										
					Percent						
.97	15.15	16.68	18.65	12.63	16.21	17.25	15.26	14.28	13.24	12.88	10.44
	238	238 296 76 81 575 11,615 141 137 141 137 0 0 0 123 -24 10 0 0 113 -24 132 9,974 98 156 33 33 000 9,785 396 10,087 180 1,528 395 1,316 784 212	238	238 296 488 464 76 81 32 60 575 11,615 11,684 12,070 141 137 142 288 141 137 142 288 0 0 0 0 0 0 0 0 123 -24 161 23 10 0 0 0 0 0 0 0 133 -24 161 23 132 9,974 9,711 9,862 98 156 183 142 33 32 4 41 000 9,785 9,504 9,678 396 10,087 10,014 10,172 180 1,528 1,670 1,897 395 1,316 784 212	238 296 488 464 500 76 81 32 60 192 575 11,615 11,684 12,070 11,873 141 137 142 288 259 141 137 142 288 259 0 0 0 0 0 0 0 0 0 0 123 -24 161 23 94 10 0 0 0 0 0 0 0 0 0 0 0 0 10 10 10 10 10	238	238 296 488 464 500 349 390 76 81 32 60 192 506 66 575 11,615 11,684 12,070 11,873 12,174 12,223 141 137 142 288 259 203 422 141 137 142 288 259 203 422 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 123 -24 161 23 94 -67 -132 10 0	238 296 488 464 500 349 390 565 76 81 32 60 192 506 66 701 575 11,615 11,684 12,070 11,873 12,174 12,223 12,571 141 137 142 288 259 203 422 203 141 137 142 288 259 203 422 203 0 0 0 0 0 0 0 0 0 0 123 -24 161 23 94 -67 -132 0	238	238	238

NOTE: Numbers may not add due to rounding.

Source: USDA, Foreign Agricultural Service, World Supply and Demand Estimates (WASDE).

NOTE: Numbers may not add due to founding.

1/ Fiscal year beginning October 1. 2/ Stocks in hands of primary distributors and CCC. 3/ Historical data are from FSA (formerly ASCS), Sweetener Market Data (SMD), and NASS, Sugar Market Statistics prior to 1992. 4/ Production reflects processors' projections compiled by the Farm Service Agency.

5/ Actual arrivals under the tariff-rate quota (TRQ) with late entries, early entries, and (TRQ) overfills assigned to the fiscal year in which they actually arrived.

6/ Starting in 2007/08, total includes imports under Mexico's WTO TRQ allocation for raw and refined sugar.

^{7/} Receipts compiled by NASS and FSA Customs data. 8/ Calculated as a residual. Largely consists of invisible stocks change.

^{9/} For FY 2008-09, combines SMD deliveries for domestic human use, SMD miscellaneous uses, and the difference between SMD imports and World Agricultural Supply and Demand Estimates imports.

Table 4--U.S. sugar: supply and use (including Puerto Rico), fiscal years, metric tons 1/, 11/15/11

Items	2000/01	2001/02	netric tons 1 2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
					ī	1,000 metric i	ons, raw val	ue				
Beginning stocks 2/	2,010	1,977	1,386	1,515	1,721	1,208	1,540	1,632	1,510	1,392	1,359	1,349
Total production 3/ ,4/	7,955	7,167	7,644	7,846	7,145	6,712	7,662	7,396	6,832	7,224	7,109	7,153
Beet sugar	4,245	3,552	4,048	4,257	4,183	4,032	4,543	4,283	3,823	4,151	4,230	4,105
Cane sugar	3,710	3,615	3,596	3,590	2,962	2,681	3,119	3,113	3,010	3,073	2,879	3,048
Florida	1,866	1,796	1,932	1,954	1,536	1,241	1,559	1,492	1,431	1,493	1,300	1,479
Louisiana	1,438	1,433	1,240	1,249	1,049	1,079	1,198	1,312	1,267	1,332	1,282	1,270
Texas	187	158	173	159	143	159	161	143	138	101	132	145
Hawaii	219	227	251	228	234	202	201	165	174	146	165	154
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0
Total imports	1,443	1,393	1,570	1,588	1,905	3,124	1,887	2,377	2,796	3,012	3,355	3,135
Tariff-rate quota imports 5/	1,158	1,051	1,098	1,113	1,277	2,348	1,473	1,228	1,243	1,682	1,536	1,379
Other program Imports	216	269	443	421	454	317	354	513	279	407	255	318
Non-program imports	69	73	29	54	174	459	60	636	1,274	923	1,564	1,439
Mexico 6/	0	0	0	0	0	0	54	630	1,272	732	1,547	1,434
Total Supply	11,408	10,537	10,599	10,950	10,771	11,044	11,088	11,404	11,138	11,627	11,823	11,637
Total exports 3/	128	125	129	261	235	184	383	184	123	191	225	181
Quota-exempt for re-export	128	125	129	261	235	184	383	184	123	191	225	181
Other exports	0	0	0	0	0	0	0	0	0	0	0	0
CCC disposal, for export	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous	112	-22	146	20	85	-61	-120	0	0	-41	-11	0
CCC disposal, for domestic non-food use	0	0	0	0	0	0	0	0	0	0	0	0
Refining loss adjustment	0	0	0	0	0	0	0	0	0	0	0	0
Statistical adjustment 7/ 8/	112	-22	146	20	85	-61	-120	0	0	-41	-11	0
Deliveries for domestic use Transfer to sugar-containing products	9,191	9,048	8,810	8,947	9,243	9,381	9,194	9,710	9,623	10,117	10,260	10,356
for exports under re-export program	89	141	166	129	110	96	153	128	109	183	178	136
Transfer to polyhydric alcohol, feed	30	30	22	38	44	46	48	56	42	31	28	36
Deliveries for domestic food and beverage use 9/	9,072	8,877	8,622	8,780	9,089	9,239	8,993	9,527	9,472	9,903	10,054	10,183
Total Use	9,431	9,151	9,084	9,228	9,563	9,504	9,457	9,895	9,746	10,268	10,474	10,537
Ending stocks 2/	1,977	1,386	1,515	1,721	1,208	1,540	1,632	1,510	1,392	1,359	1,349	1,100
Privately owned	1,266	1,194	0	0	0	0	0	0	0	0	0	0
ccc	711	192	0	0	0	0	0	0	0	0	0	0
							Percent					
Stocks-to-use ratio	20.97	15.15	16.68	18.65	12.63	16.21	17.25	15.26	14.28	13.24	12.88	10.44

NOTE: Numbers may not add due to rounding.

Source: USDA, Foreign Agricultural Service, World Supply and Demand Estimates (WASDE).

^{1/} Fiscal year beginning October 1. 2/ Stocks in hands of primary distributors and CCC. 3/ Historical data are from FSA (formerly ASCS), Sweetener

Market Data (SMD), and NASS, Sugar Market Statistics prior to 1992. 4/ Production reflects processors' projections compiled by the Farm Service Agency.

^{5/} Actual arrivals under the tariff-rate quota (TRQ) with late entries, early entries, and (TRQ) overfills assigned to the fiscal year in which they actually arrived. 6/ Starting in 2007/08, total includes imports under Mexico's WTO TRQ allocation for raw and refined sugar.

^{7/} Receipts compiled by NASS and FSA Customs data. 8/ Calculated as a residual. Largely consists of invisible stocks change.
9/ For FY 2008-09, combines SMD deliveries for domestic human use, SMD miscellaneous uses, and the difference between SMD imports and World Agricultural Demand Estimates imports.

Table 5--Mexico: sugar production and supply and sugar and HFCS utilization (sugar - metric tons, raw value), 11/15/11

Beginning stocks	Table 5Mexico: sugar production									0000	0000	0040	0044.4/	0040.4/
Reginning stocks	Fiscal Year (Oct/Sept)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 1/	2012 1/
Production 4,979 5,220 5,169 5,229 6,330 6,149 5,604 6,633 5,852 5,260 5,115 5,495 5,850 1 mports 5,957 6,326 6,769 6,464 6,851 7,654 7,809 7,401 7,796 7,395 6,600 6,803 6,932 Disappearance Human consumption 4,445 4,481 5,004 5,097 5,380 5,279 5,326 5,133 5,090 5,065 4,615 4,187 4,252 Other consumption 131 142 180 135 220 282 323 390 414 475 302 339 300 Miscellaneous 7,000 7,016 7,796 7,365 7,500 7,000							1,	,000 metric	tons, raw v	alue				
Production imports 4,979 bigs 5,220 bigs 5,290 bigs 5,330 bigs 6,149 bigs 6,631 bigs 6,631 bigs 6,680 bigs 6,168 bigs 6,148 bigs 6,680 bigs 6,148 bigs 6,680 bigs 6,649 bigs 6,549 bigs 6,540 bigs <t< td=""><td>Beginning stocks</td><td>941</td><td>1,063</td><td>1,548</td><td>1,172</td><td>1,194</td><td>1,237</td><td>1,965</td><td>1,294</td><td>1,718</td><td>1,975</td><td>624</td><td>973</td><td>805</td></t<>	Beginning stocks	941	1,063	1,548	1,172	1,194	1,237	1,965	1,294	1,718	1,975	624	973	805
Supply 5,957 6,326 6,769 6,464 6,851 7,654 7,809 7,401 7,796 7,395 6,600 6,803 6,932		4,979	5,220	5,169	5,229	5,330	6,149	5,604	5,633	5,852	5,260	5,115	5,495	5,650
Disappearance Human consumption 4,445 4,481 5,004 5,097 5,380 5,279 5,326 5,133 5,090 5,065 4,615 4,187 4,252 339 300 Miscellaneous 1,42 180 135 220 282 323 390 414 475 302 339 300 30	Imports	37	43	52	63	327	268	240	474	226	160	861	335	476
Humina consumption Other consumption Other consumption Miscellaneous Diagonal Miscellaneous Diagonal Miscellaneous Diagonal Miscellaneous Diagonal Dia	Supply	5,957	6,326	6,769	6,464	6,851	7,654	7,809	7,401	7,796	7,395	6,600	6,803	6,932
Humina consumption Other consumption Other consumption Miscellaneous Diagonal Miscellaneous Diagonal Miscellaneous Diagonal Miscellaneous Diagonal Dia	Diagnagrance													
Other consumption Miscellaneous 131 142 180 135 220 282 323 390 414 475 302 339 300 Miscellaneous 4,676 4,623 5,184 5,232 5,600 5,561 5,649 5,523 5,144 4,649 4,890 4,441 4,552 Exports 318 155 413 38 14 128 866 160 677 1,367 737 1,557 1,444 Total use 4,894 4,778 5,597 5,270 5,614 5,689 6,515 5,683 5,821 6,771 5,627 5,997 5,996 Ending stocks 1,063 1,548 1,172 1,194 1,237 1,965 1,294 1,718 1,975 624 973 805 938 Beginning stocks 888 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,683 589 918 760	• •	1 115	1 101	5.004	5.007	E 200	5 270	5 226	E 122	5,000	E 065	4 615	1 107	4 252
Miscellaneous March Marc	'	,	,			,	,	,		,	,			,
Total 4,576 4,623 5,184 5,232 5,600 5,561 5,649 5,523 5,144 5,404 4,890 4,441 4,552 Exports 318 155 413 38 14 128 866 160 677 1,367 737 1,557 1,444 Total use 4,894 4,778 5,597 5,270 5,614 5,689 6,515 5,683 5,821 6,771 5,627 5,997 5,996 Ending stocks 1,063 1,548 1,172 1,194 1,237 1,965 1,294 1,718 1,975 624 973 805 935	'	131	142	100	133	220	202	323	390					300
Exports 318 155 413 38 14 128 866 160 677 1,367 737 1,557 1,444 Total use 4,894 4,778 5,597 5,270 5,614 5,689 6,515 5,683 5,821 6,771 5,627 5,997 5,996 Ending stocks 1,063 1,548 1,172 1,194 1,237 1,965 1,294 1,718 1,975 624 973 805 935 ***Production************************************		4 576	4 600	E 101	E 222	E 600	E EG1	E 640	E E 22					4 550
Total use 4,894 4,778 5,597 5,270 5,614 5,689 6,515 5,683 5,821 6,771 5,627 5,997 5,996 Ending stocks 1,063 1,548 1,172 1,194 1,237 1,965 1,294 1,718 1,975 624 973 805 935	Total	4,576	4,023	5, 104	5,232	5,000	5,561	5,049	5,525	5, 144	5,404	4,090	4,441	4,552
Ending stocks 1,063 1,548 1,172 1,194 1,237 1,965 1,294 1,718 1,975 624 973 805 936	Exports	318	155	413	38	14	128	866	160	677	1,367	737	1,557	1,444
Reginning stocks 888 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760	Total use	4,894	4,778	5,597	5,270	5,614	5,689	6,515	5,683	5,821	6,771	5,627	5,997	5,996
Beginning stocks	Ending stocks	1,063	1,548	1,172	1,194	1,237	1,965	1,294	1,718	1,975	624	973	805	935
Production production 4,697 (4.925) (4.925) (4.876) (4.933) (4.933) (4.933) (4.933) (5.028) (5.801) (5.287) (2.26) (4.47) (2.13) (1.51) (1,0	000 metric to	ons, tel que	el/actual we	eight			
Production Imports 4,697 4,925 35 4,876 4,933 5,028 5,028 5,801 5,228 226 447 5,314 5,521 4,962 4,825 5,184 5,330 1mports 4,825 5,184 5,330 1mports 5,330 449 449 Supply 5,620 5,968 6,386 6,386 6,098 6,463 7,221 7,367 6,983 7,355 6,976 6,976 6,226 6,418 6,539 6,418 6,539 Disappearance Human consumption 124 134 170 127 208 208 266 201 201 201 201 201 201 201 201 201 201	Beginning stocks	888	1.003	1.460	1.106	1.126	1.167	1.854	1.221	1.621	1.863	589	918	760
Imports 35 41 49 59 308 253 226 447 213 151 812 316 449		4.697	4.925	4.876	4.933	5.028	5.801	,	5.314	5.521	4.962	4.825	5.184	5.330
Disappearance Human consumption		,	,			,				,				
Human consumption 4,193 4,227 4,721 4,808 5,075 4,980 5,025 4,843 4,802 4,778 4,354 3,950 4,012 Other consumption 124 134 170 127 208 266 305 368 391 448 285 320 283 Miscellaneous Total 4,317 4,361 4,891 4,936 5,283 5,246 5,329 5,211 4,853 5,098 4,613 4,189 4,295 Exports 300 146 390 36 13 120 817 151 639 1,290 695 1,469 1,362 Total use 4,617 4,508 5,280 4,972 5,296 5,367 6,146 5,362 5,492 6,388 5,308 5,658 5,657 Ending stocks 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760 883 Stocks-to-human consumption 23.9 34.5 23.4 23.4 23.0 37.2 24.3 33.5 38.8 12.3 21.1 19.2 22.0 Stocks-to-use 21.7 32.4 20.9 22.7 22.0 34.6 19.9 30.2 33.9 9.2 17.3 13.4 15.6	Supply	5,620	5,968	6,386	6,098	6,463	7,221	7,367	6,983	7,355	6,976	6,226	6,418	6,539
Human consumption 4,193 4,227 4,721 4,808 5,075 4,980 5,025 4,843 4,802 4,778 4,354 3,950 4,012 Other consumption 124 134 170 127 208 266 305 368 391 448 285 320 283 Miscellaneous Total 4,317 4,361 4,891 4,936 5,283 5,246 5,329 5,211 4,853 5,098 4,613 4,189 4,295 Exports 300 146 390 36 13 120 817 151 639 1,290 695 1,469 1,362 Total use 4,617 4,508 5,280 4,972 5,296 5,367 6,146 5,362 5,492 6,388 5,308 5,658 5,657 Ending stocks 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760 883 Stocks-to-human consumption 23.9 34.5 23.4 23.4 23.0 37.2 24.3 33.5 38.8 12.3 21.1 19.2 22.0 Stocks-to-use 21.7 32.4 20.9 22.7 22.0 34.6 19.9 30.2 33.9 9.2 17.3 13.4 15.6	Disappearance													
Other consumption Miscellaneous 124 134 170 127 208 266 305 368 391 448 285 320 283 Miscellaneous 4,317 4,361 4,891 4,936 5,283 5,246 5,329 5,211 4,853 5,098 4,613 4,189 4,295 Exports 300 146 390 36 13 120 817 151 639 1,290 695 1,469 1,362 Total use 4,617 4,508 5,280 4,972 5,296 5,367 6,146 5,362 5,492 6,388 5,308 5,658 5,657 Ending stocks 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760 883 Percent Stocks-to-human consumption 23.9 34.5 23.4 23.4 23.0 37.2 24.3 33.5 38.8 12.3	• •	4 193	4 227	4 721	4 808	5.075	4 980	5.025	4 843	4 802	4 778	4 354	3 950	4 012
Miscellaneous 4,317 4,361 4,891 4,936 5,283 5,246 5,329 5,211 4,853 5,098 4,613 4,189 4,295 Exports 300 146 390 36 13 120 817 151 639 1,290 695 1,469 1,362 Total use 4,617 4,508 5,280 4,972 5,296 5,367 6,146 5,362 5,492 6,388 5,308 5,658 5,657 Ending stocks 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760 883 Percent Stocks-to-human consumption 23.9 34.5 23.4 23.4 23.0 37.2 24.3 33.5 38.8 12.3 21.1 19.2 22.0 Stocks-to-use 21.7 32.4 20.9 22.7 22.0 34.6 19.9 30.2 33.9 9.2 <td< td=""><td>•</td><td>,</td><td>,</td><td></td><td>,</td><td>-,</td><td></td><td></td><td></td><td>,</td><td>, -</td><td>,</td><td></td><td>,</td></td<>	•	,	,		,	-,				,	, -	,		,
Total 4,317 4,361 4,891 4,936 5,283 5,246 5,329 5,211 4,853 5,098 4,613 4,189 4,295 Exports 300 146 390 36 13 120 817 151 639 1,200 695 1,469 1,362 Total use 4,617 4,508 5,280 4,972 5,296 5,367 6,146 5,362 5,492 6,388 5,308 5,658 5,657 Ending stocks 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760 883	•		101	110		200	200	000	000					200
Total use 4,617 4,508 5,280 4,972 5,296 5,367 6,146 5,362 5,492 6,388 5,308 5,658 5,657 Ending stocks 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760 883		4,317	4,361	4,891	4,936	5,283	5,246	5,329	5,211					4,295
Ending stocks 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760 883 **Percent** Stocks-to-human consumption 23.9 34.5 23.4 23.4 23.0 37.2 24.3 33.5 38.8 12.3 21.1 19.2 22.0 Stocks-to-use 21.7 32.4 20.9 22.7 22.0 34.6 19.9 30.2 33.9 9.2 17.3 13.4 15.6	Exports	300	146	390	36	13	120	817	151	639	1,290	695	1,469	1,362
Ending stocks 1,003 1,460 1,106 1,126 1,167 1,854 1,221 1,621 1,863 589 918 760 883 **Percent** Stocks-to-human consumption 23.9 34.5 23.4 23.4 23.0 37.2 24.3 33.5 38.8 12.3 21.1 19.2 22.0 Stocks-to-use 21.7 32.4 20.9 22.7 22.0 34.6 19.9 30.2 33.9 9.2 17.3 13.4 15.6	Total use	4.617	4.508	5.280	4.972	5.296	5.367	6.146	5.362	5.492	6.388	5.308	5.658	5.657
Percent Stocks-to-human consumption 23.9 34.5 23.4 23.4 23.0 37.2 24.3 33.5 38.8 12.3 21.1 19.2 22.0 Stocks-to-use 21.7 32.4 20.9 22.7 22.0 34.6 19.9 30.2 33.9 9.2 17.3 13.4 15.6														
Stocks-to-human consumption 23.9 34.5 23.4 23.4 23.0 37.2 24.3 33.5 38.8 12.3 21.1 19.2 22.0 Stocks-to-use 21.7 32.4 20.9 22.7 22.0 34.6 19.9 30.2 33.9 9.2 17.3 13.4 15.6	Ending stocks	1,003	1,460	1,106	1,126	1,167	1,854	1,221	1,621	1,863	589	918	760	883
Stocks-to-use 21.7 32.4 20.9 22.7 22.0 34.6 19.9 30.2 33.9 9.2 17.3 13.4 15.6								P	ercent					
	Stocks-to-human consumption	23.9	34.5	23.4	23.4	23.0	37.2	24.3	33.5	38.8	12.3	21.1	19.2	22.0
HFCS consumption (dry weight) 580 600 263 130 135 355 667 698 782 653 1.418 1.635 1.635	Stocks-to-use	21.7	32.4	20.9	22.7	22.0	34.6	19.9	30.2	33.9	9.2	17.3	13.4	15.6
	HFCS consumption (dry weight)	580	600	263	130	135	355	667	698	782	653	1,418	1,635	1,635

1/ Forecast.

Source: USDA, Foreign Agricultural Service, PSD database (historical data); World Agricultural Supply and Demand Estimates (forecast data).



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Related Websites

Sugar and Sweeteners Outlook http://www.ers.usda.gov/Publications/SSS/WASDE http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documented=1194 Sugar Briefing Room, http://www.ers.usda.gov/briefing/Sugar/

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